

R E M A R K S

This Amendment is responsive to the Office Action dated April 6, 2004.

Claims 1-19 are currently pending in the application. Of those claims, all are rejected under 35 U.S.C. 103(a) as being unpatentable over Garza, Jr. U.S. Patent No. 5,480,353. The Abstract of the Disclosure is also objected to as the last line includes the recitation "improved motor life and reliability".

Applicant herein amends independent claim 1 to correct a typographical error only. The amendment is not made for patentability purposes whatsoever, and is in no way to be construed as being limiting.

Applicant herein amends independent claim 14 to more particularly and patentably distinguish that claim over the cited prior art, and likewise amends claim 16, which depends from amended claim 14, to further patentably distinguish that claim over the cited prior art. Claim 17 is amended to comply with the language of claims 14 and 16, from which it depends. Similarly, Applicant herein amends independent claim 18 to more particularly distinguish the subject matter of that claim from the cited prior art, and cancels claim 19. All of the claims pending in the application, namely, claims 1-18, are therefore believed to be patentably distinguishable over the cited prior art and allowable.

Turning to claim 1, that claim is directed to a drive for a cleaning fan supported by a frame member of an agricultural combine, the fan including an input rotatable about an axis therethrough, the drive requiring a motor including an output rotatable about an axis therethrough; a mounting element for mounting the motor to the frame member such that the output is in axial end-to-end relation the input of the fan; and

a resiliently flexible member connecting the output of the motor in rotatably driving relation to the rotatable input of the fan, the flexible member having sufficient resiliently flexibility so as to allow limited variations in relative angular orientation and axial spacing between the input and the output.

An exemplary embodiment of a drive according to claim 1 is illustrated in Fig. 4 of the present application.

Attendant advantages of the drive of claim 1, as recited in the Summary section of the present application includes that angular misalignment and axial displacement between the output of the motor and the fan shaft is compensated for and/or corrected, both during initial assembly and during operation. As a result, stress on the motor output is reduced resulting in improved motor life and reliability.

Addressing the rejection of claim 1, Applicant notes that, in the annotations added by the Examiner to Fig. 2 of Garza as set forth in paragraph 3 of the Detailed Action, a coupler connecting a motor 42 to a shaft 38 is identified by the Examiner as a "conventional coupler (as disclosed by the Applicant to be known)". Applicant agrees. However, Applicant respectfully disagrees that Garza, by virtue of the presence of this coupler, discloses, teaches and/or suggests that such coupler shown in Fig. 2 in any way comprises the resiliently flexible member having sufficient resilient flexibility so as to allow limited variations in relative angular orientation and axial spacing between the input and the output, as required in claim 1. In this regard, Applicant observes that the coupler depicted in Fig. 2 of Garza appears more likely to be representative of coupler 20 in Fig. 3 of the present application which, in paragraph 0012 of the present application, is identified as a conventional coupler 20. Such a coupler 20 is not contemplated to be a flexible coupler, but instead is a rigid coupler.

An embodiment of the present invention including a conventional coupler 20 is illustrated in Figs. 2 and 3 of the present application. The flexibility in that embodiment of the invention is provided by a resiliently flexible mounting element 34, not coupler 20. In contrast, in the embodiment of the present invention shown in Fig. 4, the resilient flexibility is provided by flexible coupling 52 which is illustrative of the resiliently flexible member of claim 1. Thus, in the embodiment of the present invention depicted in Figs. 2 and 3 of the present application, angular misalignment and axial displacement is accommodated by mounting the motor in its entirety to the frame by a resiliently flexible member, whereas in the embodiment of the invention shown in Fig. 4 and as set

forth in claim 1, such misalignment and displacement is accommodated by a flexible member connecting the output of the motor to the input of the fan.

Addressing Garza, Applicant can find no disclosure or teaching of connection of the output of the motor of that device to shaft 38 by a resiliently flexible member, nor even a suggestion or a motivation in any manner of allowing limited variations in relative angular orientation and axial spacing between the motor and shaft , as required in claim 1.

For the foregoing reasons, Applicant respectfully asserts that the drive of claim 1 is not obvious in light of the disclosure of Garza, and therefore claim 1 is believed to be patentably distinguishable thereover and allowable.

Claims 2-7 depend from claim 1 and add still further limitations thereto. In particular, claim 6 requires the resiliently flexible member to include flanges for attachment to the input and to the output, respectively, for rotation therewith, and a resilient elastomeric element disposed between and connected to the flanges, respectively. Applicant finds no such element disclosed in Garza. Accordingly, claims 2-7, in combination with base claim 1, are believed to be patentably distinguishable over the cited prior art and allowable.

Independent claim 8 is directed to a drive for a cleaning fan supported by a frame member of an agricultural combine, requiring a motor including an output rotatable about a first axis therethrough, the output being connectable in rotatably driving relation to an input of a cleaning fan rotatable about a second axis therethrough, and a mounting element for mounting the motor to the frame member, the mounting element including a **resiliently flexible member** for supporting and holding the motor such that the first axis will be substantially aligned with the second axis when the output is rotatably drivingly connected to the input, **the resilient flexibility of the mounting element allowing a limited amount of relative axial and angular movement between the output and the input.**

Again, an attendant advantage of the drive of claim 8 is that angular misalignment and axial displacement between the output of the motor and the input of the fan is compensated for and/or corrected, both during initial assembly and during operation. More particularly, as set forth in claim 8, the resiliently flexible member of the claim supports and holds the motor such that the axis of the output thereof can be substantially aligned with the input of the fan for connection in rotatably driving relation thereto, such as when the motor is installed, and will provide a limited amount of relative axial and angular movement between the output and the input thereafter. This is not disclosed, taught and/or suggested in the Garza patent cited against the subject claim.

Again, examining Fig. 2 of Garza reproduced in paragraph 3 of the Detailed Action, item 44 of that figure is identified by the Examiner's notation as a flexible cantilever support for the motor. However, Applicant can find no indication or even suggestion anywhere in Fig. 2 or elsewhere in the Garza patent indicating that item 44 is flexible. Applicant only finds in column 8, lines 5 and 6 of Garza that motor 42 is connected to wall 34 with a bracket 44 which prevents the motor housing or body from spinning. Applicant therefore respectfully asserts that bracket 44 would be more appropriately relied on to disclose properties appropriate for preventing spinning, but not flexibility as required in the claim. For the foregoing reasons, independent claim 8 is believed to be patentably distinguishable over the cited prior art and allowable.

Claims 9-13 depend from claim 8 and add further limitations thereto. More particularly, claim 11 requires the resiliently flexible member of claim 8 to have an elongate shape and extend longitudinally between the frame member and the motor transversely relative to the first and second axes. This prevents rotation of the motor body about the axes, while allowing flexibility for the installation of the motor to the frame, and also for subsequent operation. This is not disclosed, taught and/or suggested anywhere in Garza. Accordingly, claims 9-13, in combination with base claim 8 are believed to be patentably distinguishable over the cited prior art and allowable.

Amended independent claim 14 is directed to a cleaning fan assembly for a self leveling cleaning system of an agricultural combine, requiring a fan shaft supported by a structural element of the cleaning system for rotation about a first longitudinal axis through the fan shaft, and a drive including a motor having a rotatable output shaft connected in end-to-end axially aligned rotatable driving relation to the fan shaft, wherein

the drive is flexibly mounted to the structural member by an elastomeric member so as to allow some limited movement of the drive relative to the structural member while maintaining the axially aligned rotatably driving relation to the fan shaft.

Again, claim 14 is directed to the aspects of the invention represented in Figs. 2 and 3 of the present application, and provides the attendant advantages thereof as set forth above. Applicant respectfully asserts that the combination of features of amended claim 14 is not disclosed, taught and/or suggested in any way in Garza, and, more particularly, nowhere in Garza is there even a motivation for flexibly mounting the drive of that apparatus to the structural components thereof by an elastomeric member. For the foregoing reasons, Applicant respectfully asserts that amended claim 14 is patentably distinguishable over the cited prior art and allowable.

Claims 15-17 depend from amended claim 14 and add still further limitations thereto. More particularly, claim 16 requires the elastomeric member to have an elongate shape and extend longitudinally between the structural element and the motor transversely to the axially aligned shafts. Applicant finds no disclosure or even suggestion of usage of an elastomeric member in the claimed manner anywhere in Garza. Claim 17 requires the elastomeric member to support the motor in cantilever relation to the structural element. Again, no disclosure or suggestion of this is found anywhere in Garza. Accordingly, claims 15-17, in combination with the limitations of amended base claim 14, are believed to be patentably distinguishable over the cited prior art and allowable.

Amended independent claim 18 is directed to a cleaning fan assembly for a self leveling cleaning system of an agricultural combine, requiring a fan shaft supported by a structural element of the cleaning system for rotation about a first longitudinal axis through the fan shaft, **and a drive including a motor having a rotatable output shaft connected in end-to-end rotatably driving relation to the fan shaft by a resiliently flexible coupler** so as to allow some limited relative angular and axial movement therebetween during the rotation thereof, **the resiliently flexible coupler including flanges for attachment to the shafts, respectively, for rotation therewith, and a resilient elastomeric element disposed between and connected to the flanges, respectively.**

As asserted above in reference to claim 1 and incorporated herein by reference, the coupler of Garza is in no way indicated or suggested to have any flexible characteristics whatsoever, nor does it disclose or even suggest the claimed resilient flexible coupler including a resilient elastomeric element disposed and connected to flanges on the shafts of a fan and a drive therefor.

For the foregoing reasons, amended claim 18 is believed to be patentably distinguishable over the cited prior art and allowable.

It is now believed that all of the claims in the present application, namely, claims 1-18, contain limitations which patentably distinguish them over the cited prior art. None of the prior art of record discloses a cleaning fan including a drive which can be flexibly mounted and/or connected in driving relation to the fan, for the functional advantages and purposes set forth in the claims and present specification. Therefore, favorable action and allowance of all of the claims is respectfully requested.

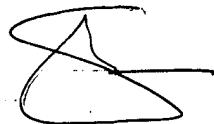
A one month extension of time is requested to extend the time for submitting this Amendment. The Office Action was mailed on April 6, 2004, and the initial three month period in which to submit a response ended on July 6, 2004. The one month extension of time extends the response time up to and including August 6, 2004. Enclosed is a check in the amount of \$110.00 which is the charge for an extension of one month as set forth

in 37 CFR §1.17(a)(2) for a large entity. The Commissioner is authorized to charge any credit or deficiency to Deposit Account No. 08-1280.

If the Examiner has any further requirements or suggestions for placing the present claims in condition for allowance, Applicant's undersigned attorney would appreciate a telephone call at the number listed below.

Respectfully submitted,

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